WHAT IS CLAIMED IS:

1. A vibration isolator for a ceiling fan, and the vibration isolator comprising:

a stationary tube having a bottom end, a diameter and a sidewall;

a rotatable tube rotatably connected to the stationary tube and having a top end and a sidewall, the top end of the rotatable tube rotatably connected to the bottom end of the stationary tube;

a torsional damping device connecting the stationary tube to the rotatable tube to reduce torsional forces; and

a compression spring mounted between the bottom end of the stationary tube and the top end of the rotatable tube to reduce longitudinal vibrations.

2. The vibration isolator as claimed in claim 1, wherein

the stationary tube further has a bottom edge formed inward at the bottom end of the stationary tube and forming a first opening,

the rotatable tube further has a top edge formed inward on the top end of the rotatable tube and forming a second opening, and

the torsional damping device comprises

a connecting tube rotatably mounted in the stationary tube, and having an enlarged open tubular head with a diameter, a shoulder and a narrow tubular neck, the diameter of the enlarged open tubular head being slightly smaller than the diameter of the stationary tube, the narrow tubular neck having a bottom end passing through the first opening in the bottom end of the stationary tube, extending out of the first opening and attached to the top edge of the rotatable tube;

multiple rollers rotatably mounted between the bottom edge and the shoulder of the connecting tube; and

a coil spring mounted in the stationary tube and having a first end attached inside the sidewall of the stationary tube, and a second end passing through the connecting tube and the second opening in the rotatable tube, extending into of the rotatable tube and attached inside the sidewall of the rotatable tube.

3. The vibration isolator as claimed in claim 1, wherein

the stationary tube further has a shoulder, a narrow neck and an exterior thread, the narrow neck has a top end, the shoulder is integrally formed between the bottom end of the stationary tube and the top end of the narrow neck, and the exterior thread is defined around the narrow neck and has a pitch diameter,

the top end of the rotatable tube is rotatably connected to the stationary tube and has an internal thread defined on the sidewall of the rotatable tube, the internal thread has a pitch diameter larger than the pitch diameter of the exterior thread on the narrow neck, and

the torsional damping device comprises

a coil spring mounted in the stationary tube and having a first end attached inside the sidewall of the stationary tube, and a second end passing through the narrow neck, extending out of the narrow neck and attached inside the sidewall of the rotatable tube.

4. The vibration isolator as claimed in claim 2, wherein the stationary tube further has an annular slot with a width defined in the sidewall of the stationary tube near the bottom end of the stationary tube, and the torsional

damping device further comprises a positive limit attached to the enlarged open tubular head, and the positive limit having an outside end slidably mounted in the annular slot and a diameter being smaller than the width of the annular slot to define a gap between the positive limit and the annular slot.

5. The vibration isolator as claimed in claim 3, wherein the rotatable tube further has an annular slot with a width defined in the sidewall of the rotatable tube near the top end of the rotatable tube, and the torsional damping device further has a positive limit attached to the narrow neck, and the positive limit having an outside end slidably mounted in the annular slot and a diameter being smaller than the width of the annular slot to define a gap between the positive limit and the annular slot.